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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,599	09/05/2006	Tomas Lackman	P/1830-22 V 1284	7602

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OSTROLENK FABER GERB & SOFFEN
1180 AVENUE OF THE AMERICAS
NEW YORK, NY 100368403

EXAMINER

SHABMAN, MARK A

ART UNIT	PAPER NUMBER
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2856

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,599	Applicant(s) LACKMAN, TOMAS	
	Examiner MARK SHABMAN	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/5/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: References to the claims are made on pages 1 line 6 and page 2 line 5. It is recommended that these be removed to prevent issues if claims are later cancelled or renumbered.

Appropriate correction is required.

Claim Objections

Claims 1 and 2 are objected to because of the following informalities:

Regarding **claim 1**, line 8 of the claim states "that means are provided" which is confusing. It is recommended that the word "that" be removed as it is not necessary.

Regarding **claim 2**, the term "preferably" is indefinite and should be removed or rephrased for clarity.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Losev US Patent 4,890,477 (hereinafter referred to as Losev) in view of Mani US

Patent 66,199,424 B1 (hereinafter referred to as Mani) and further in view of Sandhu
US Patent 5,036,015 (hereinafter referred to as Sandhu).

Regarding **claim 1**, Losev discloses a device for testing a ski sliding surface by testing the friction between a waxed member and snow surface. The apparatus comprises a disk 8 which is carried by a stand in axle 4, and has a "substantially planar work surface" 9, on which a layer of wax would be applied (column 4). Members for pressing of the disc against the snow by a preselected force exist in the weights 28 which can be used to simulate a skiers weight (column 7). Further is included a "driving member" for driving the disk in relation to the snow in the ratchet and pawl, gear and axle components. The apparatus of Losev does not disclose however said driving member as an electric motor having a known relationship between the power consumption and braking power of the disc as is claimed.

Mani discloses a friction testing machine in which a frictional coefficient is determined between a test sample S and a surface 22 (figure 1). In one case, the sample S is rotated about an axis perpendicular to the friction surface by an electric motor 100 (column 5). The apparatus then uses a data acquisition system to determine the friction between the two sample and the surface. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Losev with those of Mani to incorporate an electric motor into the device of Losev to aid in the rotation of the disc (sample) as it has been held that broadly providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192. Further, Mani

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discloses in column 4 that the apparatus can be used for determination of friction between a test sample and snow, much in the way that Losev does. Mani does not disclose determining the friction by "having a known relationship between the electric power consumption of the electric motor and the braking power of the disc" as is claimed.

Sandhu discloses a method for determining the friction between a rotating disk and a semiconductor wafer. The rotation of the disk/wafer is by an electric motor. Column 2 describes how the load of the motor is monitored and any change in current output indicates an increase in load due to friction. It would have been obvious to one of ordinary skill in the art at the time of invention to monitor the motor of Mani in a similar fashion wherein the current output of the motor would correspond to a frictional coefficient between the test disc and the snow to simplify the apparatus by avoiding the use of separate sensors, as Sandhu teaches the current signal will be changed. Since the output signal is determined by the amount the disc moves in relation to the surface, the measured value would be related to the braking power of the disc as claimed. It further would have been obvious to one of ordinary skill in the art at the time of invention to include readout means to convey the information to the user of the apparatus effectively.

Regarding **claim 2**, the means for readout of the apparatus as previously disclosed would include a device for measuring and displaying the current of the electric motor wherein a free spinning motor with no friction would show a maximum and any current below that amount would be related to the power consumption as power is

proportional to the current. Thus the means would be enabled for readout of power consumption at a stable displacement motion of the disc, and at a predetermined speed of the disc as claimed.

Regarding **claim 3**, the apparatuses of both Losev and Mani indicate that the sample "disc" is removable from the testing apparatus. It would have been obvious to one of ordinary skill in the art at the time of invention to allow for switching of discs with different waxes on them for comparison of different waxes on similar surfaces or different surfaces with the same wax. Doing so would allow for testing of various products without having to clean the disk between each test.

Regarding **claim 4**, the disk of Losev is arranged rotatably around a centrally located normal to the working surface as claimed allowing for the entire bottom of the disc covered in wax to be in contact with the working surface.

Regarding **claim 5**, as a change in current is used to measure the coefficient of friction as disclosed by Sandhu, it would have been obvious to use a direct current source with a constant voltage, such as a battery, to ensure that the power change is based on only a change in current and not voltage. This change in current corresponds to friction between the disc and surface.

Regarding **claim 6**, it would have been obvious to one of ordinary skill in the art at the time of invention to include "compensating means" in the circuit of the electric motor of Sandhu to prevent any changes in current as a result of the motor itself thereby ensuring that all current fluctuations are a result of the frictional forces between the surface and the disc.

Regarding **claim 7**, the apparatuses of both Losev and Mani indicate that the sample "disc" is removable from the testing apparatus. It would have been obvious to one of ordinary skill in the art at the time of invention to allow for switching of discs with different waxes on them for comparison of different waxes on similar surfaces or different surfaces with the same wax. Doing so would allow for testing of various products without having to clean the disk between each test.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK SHABMAN whose telephone number is (571)270-3263. The examiner can normally be reached on M-F 7:30am - 5:00pm, EST (Alternating Fridays Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. S./

Examiner, Art Unit 2856

/Hezron Williams/

Supervisory Patent Examiner, Art Unit 2856